What is claimed is:

[Claim 1] 1. A dynamic level-adjustment compensation circuit suited for compensating a dynamic image signal input to a display device, wherein said dynamic image signal in different frame times has different gray-level distributions, the circuit comprising:

an analyzing unit used to analyze the gray-level distribution of said dynamic image signal and output an analysis signal according to the analysis result;
a plurality of gamma voltage generators, each of which produces a gamma voltage determined by a gamma characteristic curve; and
a selector electrically connected to said analyzing unit and said gamma voltage generators, wherein said selector is suited for selecting one of said gamma voltage generators according to said analysis signal and said selected gamma voltage generator outputs said corresponding gamma voltage.

[Claim 2] 2. The circuit of Claim 1, wherein said analyzing unit comprises an application specific integrated circuit.

[Claim 3] 3. The circuit of Claim 1 further comprising a plurality of switch units electrically connected to said selector and said gamma voltage generators, said selector controlling said switch units 208 kept in an open mode or in a close mode.

[Claim 4] 4. The circuit of Claim 1, wherein a number of said gamma voltage generators is at least three, one of said gamma voltage generators having the gamma characteristic curve with a gamma value of 2.0, another one of said gamma voltage generators having the gamma characteristic curve with a gamma value of 2.2, the other one of said gamma voltage generators having the gamma characteristic curve with a gamma value of 2.4.

[Claim 5] 5. A dynamic level-adjustment compensation method suited to compensate a dynamic image signal input to a display, wherein said dynamic image signal in different frame periods has different gray-level distributions, the method comprising:

step (a): analyzing the gray-level distribution of said dynamic image signal and outputting an analysis signal according to an analysis result;

step (b): selecting a gamma characteristic curve according to said analysis signal; and

step (c): outputting a gamma voltage according to said selected gamma characteristic curve.

[Claim 6] 6. The method of Claim 5, wherein analyzing the gray-level distribution of said dynamic image signal is performed by an application specific integrated circuit.

[Claim 7] 7. The method of Claim 5, further comprising repeating steps (a), (b) and (c) in a next frame time.

[Claim 8] 8. The method of Claim 5, wherein the step of selecting a gamma characteristic curve is made from three gamma characteristic curves with gamma values of 2.0, 2.2 and 2.4.